

CARBON MATERIAL AND METHOD OF MAKING SAME

ABSTRACT OF THE DISCLOSURE

The present invention provides a novel carbon material for a electric double-layer capacitor having characteristics entirely different from prior art activated carbon. The capacitor develops a capacitance by a mechanism entirely different from the mechanism of an electric double-layer capacitor using activated carbon. The novel capacitor has improved performance including capacitance. The capacitor has polarized electrodes immersed in an organic electrolyte. The electrodes are made of a nonporous carbon having crystallites of graphite-like carbon. When a voltage is applied, electrolyte ions are intercalated between the layers of the crystallites of the graphite-like carbon together with the solvent. Thus, electric double layers are formed. Intercalation is induced by the first cycle of charging. In the second and following cycles, the capacitance is developed.